December 2014 News Notes

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Alumni Change Lives

Sean O'Brien is an undergraduate student in SES working with Professor Larry Krissek. Here he explains how funding from the Friends of Orton Hall fund helped to further his undergraduate studies.

My trip to the 2014 GSA Fall Annual Meeting & Exhibition in Vancouver, BC was exciting and productive, and would not have been possible without the support of the Friends of Orton Hall Fund.

With my graduation and graduate school application deadlines quickly approaching, attending my first GSA meeting provided me with the opportunity to explore fields of graduate research, network with potential advisors, and learn about some of the most cutting-edge work being done in geoscience. While in Vancouver, I presented my senior thesis



research conducted under Dr. Lawrence Krissek, in which I analyze the mineralogy of sediment samples from contourite deposits in the Gulf of Cádiz to interpret the paleocirculation of a bottom-water current in the region.

Most of all, I enjoyed supporting my classmates and colleagues in the School of Earth Sciences. Many of them were presenting their research for the first time at a national conference, and they all did a tremendous job of communicating the important work done in our department. The trip contributed to the camaraderie in our department, my own confidence in the relevance of my current research, and my opportunities for pursuing future research endeavors. I extend my thanks to those supporting Friends of Orton Hall for making this experience a reality.

Annual Meeting of the AIPG - Ohio Section

On November 20th, the Ohio Section of the American Institute of Professional Geologists held their annual meeting, which included dinner, awards, and a talk on Antarctic Drilling by SES's Dr. Krissek, at the faculty club on Ohio State's campus. The newly-reinstated OSU Student Chapter worked with the Ohio Section to plan the meeting, raise money for the Student Chapter via 50/50 raffle, and provide discounted tickets for student members to attend. The 15 student attendees got to network and mingle with the 30 professionals representing over 20 companies across Ohio and numerous geological specialties.



The AIPG OSU Student Chapter attendees, Dr. Royce (the student chapter's advisor), and Dr. Krissek gather for a photograph at the end of the evening (photograph courtesy of Erin Lathrop).

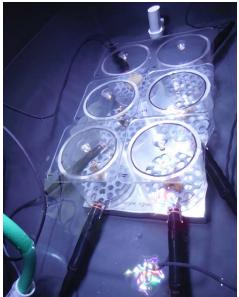
Bergstrom and Ausich named to Emeritus Academy

Stig Bergstrom and Bill Ausich were selected as inaugural members of Ohio State's Emeritus Academy (link). The mission of the Emeritus Academy is to "promote the ongoing engagement of emeritus faculty in research and in scholarly and creative activity for the enhanced reputation of the University and for the benefit of society at large". This group is expected to foster scholarship among its members and promote the concept of lifetime scholars. Even after "retirement", both Stig and Bill continue to have very active research programs, publish their results in the best journals, and contribute to the School and their profession. Congratulations to Stig and Bill!

Coral Research in Hawaii

Prof. Grottoli and her team (graduate student Kerri Dobson, postdoc Jeremy Williams) were in Hawaii in December conducting research on the ongoing coral bleaching event in Hawaii. Coral bleaching is a stress response to above normal seawater temperatures that persist for at least 10 days that cause corals to eject their symbiotic algae and turn white (hence the term "bleaching"). While they can live for some time in the bleached state, they are physiologically compromised. Corals can recover from bleaching when temperatures return to normal, or can die if the warm event is too severe. As atmospheric CO₂ increases, the oceans are warming and becoming more acidic. Prof. Grottoli and her team are interested in knowing how corals will cope with bleaching stress at the end of the century when the oceans will be 100-150% more acidic than they are today. They are running experiments in tanks on the naturally-bleached corals to test the hypothesis that ocean acidification slows down recovery from bleaching events. Results from this study will help to determine which species or populations of corals might persist in the future, and provided needed data to ground-truth predictive models of coral persistence.







At left: Prof. Andrea Grottoli, graduate student Kerri Dobson, and postdoc Dr. Jeremy Williams are very happy the respirometry system worked on the first try. Center: View of the respirometry system chambers with corals in them. At right: Corals in the tanks. Note the pale corals are bleached and the brown ones are not.

AAPG Chapter Update

On November 21st, Shell Principal Geophysicist Elizabeth Diaz presented an information session on behalf of Royal Dutch Shell and lead attendees through geological appraisal module of the Malampaya Gas Field. Students worked together to assess the future location of potential wells. The chapter also conducted a canned food drive, with all proceeds donated to the Mid-Ohio Food Bank. The top photo at right shows Diaz's presentation to the chapter.

On December 2nd, chapter members attended "Seismic Data in the Petroleum Industry" presented by SES's Dr. Derek Sawyer (see bottom photo, at right). Students were introduced to the several aspects and applications of seismic data and its importance in exploration geology. The meeting also entailed a review of the fall semester, a preview of the spring and the AAPG ACE 2015 in Denver.

We invite you to join the Ohio State Petroleum Geoscience Alumni & AAPG Student Chapter Network LinkedIn Group. Though still in development, this group is intent on bridging the gap between Buckeye alumni professionals and geoscience students interested in careers in oil & gas exploration. We hope to create a network of academic and professional discussions, business and career opportunities, OSU Football, and social networking.





If any alumni are interested in visiting or interacting with the AAPG Student Chapter at OSU during this coming spring semester, please feel free to contact us at aapg@osu.edu. Keep up to date on all things OSU AAPG at this link. Stayed Tuned & Go Bucks!!!

Brevia

Undergraduate students Casey Saup (SES) and Spencer Palombit (EEOB) have been awarded OSU Undergraduate Research Scholarships for their research work in Dr. Andrea Grottoli's lab. Ms Casey Saup was awarded \$2,500 for her research entitled "Physiological and isotopic responses of the coral Stylophora pistillata to future ocean conditions". Mr. Spencer Palombit was awarded \$4,000 for his research entitled "Effect of annually recurring bleachign stress on the lipid class composition of teh Caribbean coral Orbicella faveolata". Both students will continue to work on their research projects as part of their senior thesis in Dr. Grottoli's lab. Congratulations Casey and Spencer!

SES undergraduate student Steve Coss has been awarded an Arts & Sciences Undergraduate Research Scholarship. Mr. Coss was awarded \$1,000 for his research entitled "Using Satellite Altimetry to Calculate Hydraulic Storage Change of the Mackenzie River for Estimating Snow Melting". Steve is working in Dr. Durand's lab. Congratulations, Steve!

Robert Edward Sheriff passed away on November 19, 2014. Robert was the author of the *Encyclopedic Dictionary of Applied Geophysics*. Robert held MS and PhD degrees in Physics from Ohio State. An obituary via the *Houston Chronicle* is available here. Another story about Sheriff's life is available here.

Prof Lonnie Thompson was included in TIME Magazine's special issue "Great Scientists: The Geniuses, Eccentrics and Visionaries Who Transformed Our World" (link). The issue covered many disciplines including Physics, Mathematics, Paleotology, Astronomy, Chemistry, Earth Sciences, Archaeology, Social Sciences, Genetics, Medicine. In Earth Sciences they highlight: Rachel Carson, Aldo Leopold, Charles Lyell, Louis Agassiz, Alfred Wegner, Jacques Cousteau, Paul Crutzen, Lonnie Thompson, Stephen Schneider and James Lovelock. Congratulations, Lonnie!

Chet Bonar (M.S. 1948) passed away on Oct. 3, 2014. According to his obituary, Chet "explored Alaska's North Slope, the Pacific Rim and many other areas as a career-long geologist for ARCO". He is survived by his wife, Eunice Bonar, and his daughter Becky Bonar. A link to his obituary is available here.